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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/611,219	07/06/2000	Scott A. Chalmers	02578.0006.00US00	4816

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HOWREY SIMON ARNOLD & WHITE LLP
BOX 34
1299 PENNSYLVANIA AVENUE NW
WASHINGTON, DC 20004

EXAMINER	
PHAM, HOA Q	
ART UNIT	PAPER NUMBER
2877	

DATE MAILED: 07/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/611,219	Applicant(s) CHALMERS ET AL.	
	Examiner Hoa Q. Pham	Art Unit 2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-36 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-36 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5,6 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 6, 15, 18-21, 25, and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Rohr et al (6,069,695).

Claims 6, 15, 18-21, 25, and 34 are read on the teachings of Rohr et al. Rohr et al discloses a light source (L) for generating a light signal (P), a one-spatial-dimension imaging spectrometer (SP) for receiving light from the light source that has been reflected by a sample (T), and derive therefrom a plurality of signals (using grating G), each signal representative of the intensity of a wavelength component of the reflected light at a particular location; a computer (DM) configured to receive from the spectrometer the plurality of signals, and determined the properties of the sample. See figure 1.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-5, 7-14, 16-17, 22-24, 26-33, and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rohr et al in view of Kokubo et al (5,686,993).

Regarding claims 1-3, 5, 7-9, 11, 17, 19-20, 26-30, and 36, Rohr et al does not explicitly teach that the sample is scanned by using a translation mechanism for moving the sample or by moving the imager. However, such a feature is known in the art, for example as taught by Kokubo et al. Kokubo et al discloses a method and apparatus for measuring the thickness of a thin film in which the sample (SP) is scanned in the X-Y directions by using a stage controller (see column 5 lines 54-61). Those of ordinary skill in the art at the time the invention was made to include in Rohr et al a translation mechanism as taught by Kokubo et al for the purpose of scanning the whole surface of the sample. In addition, it would have been obvious to one having ordinary skill in the art at the time the invention was made to move the imager with respect to the sample instead of moving the sample because they are function in the same manner.

Regarding claims 1, 12-14, 22-24, and 31-33, Kokubo et al teaches that the spectrometer can be used for determining the thickness of a sample. Thus it

would have been obvious to use the spectrometer of Rohr et al for determining the properties of a sample (i.e., thickness, refractive index, extinction coefficient, etc...) as taught by Kokubo et al if additional measures were desired.

5. Claims 1-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kokubo et al in view of Finland reference (***ImSpector*** imaging Spectrograph brochure including specifications, **Spectral Imaging Ltd**,.) (of record).

Kokubo et al discloses a method and apparatus for measuring film thickness which has all the features of the present invention except that the spectroscopic unit (40) is a one-spatial-dimension imaging spectrometer. However, such a feature is known in the art as taught by "ImSpector imaging spectrograph" reference (see figure in page 1). Those of ordinary skill in the art at the time the invention was made to replace the spectroscopic unit of Kokubo et al by a one-spatial-dimension imaging spectrometer taught by ImSpector reference because the reference suggests that such spectrometer could be used for surface inspection.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kondo (5,120,966), Mumola (5,543,919) and McGahan (6,381,009) disclose a thickness-measuring device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa Q. Pham whose telephone number is (703) 308-

4808. The examiner can normally be reached on 6:30 AM to 5 PM, Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (703) 308-4881. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Hoa Q. Pham
Primary Examiner
Art Unit 2877

HP
June 29, 2002